The Unofficial Glock Users Manual

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Note: This is version 1.1 of the manual, and it's current as of April 13, 1997. I'm always putting together information for the next revision, so I'd appreciate it if you'd send me comments (positive and negative), suggestions, etc. via *email*. These have traditionally helped make a better Unofficial Glock Users Manual (UGUM for short). (This space is my usual plea for contact with you, the user; that's who I wrote this for, and your ideas and encouragement make a better UGUM for everyone to use). Please keep sending comments, compliments, and criticisms, thanks, and enjoy!



Also, you could <u>bookmark</u> this specific page, but it's better to bookmark the <u>main Glock page</u> as that one is guaranteed not to be moved around unnecessarily. I think it really is a better idea to bookmark my <u>Main Page</u> at http://glock.missouri.edu/ or the <u>Glock Page</u> instead.



P.S. If you haven't <u>signed the guestbook (view it here)</u> on my web page yet, *please do*! It's all that I ask for anything you might have (hopefully) gotten from visiting. Thanks!

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*1. Disclaimer

Please read the entire manual before attempting any of the procedures listed in this manual. Heed all of the Notes and Safety Cautions.

This manual is intended to be supplemented by technical bulletins. Information and specifications contained within this manual may change without notification. Contact the author or Glock (address and phone information is at the end of the file) if you have any questions about a Glock pistol, and they will gladly help you out. Glock can also provide you with the closest Glock certified field representative.

This manual does not contain the actual armorer specific information. The actual armorer's manual provides basic service and backup information for Certified Glock Armorers, and is not intended for use by other personnel. Armorer certification can only be granted by Glock after attending a Glock Armorer's School.

This means if you are not a Certified Glock Armorer, do not attempt any of the Armorers tasks. Doing so can damage the pistol and cause possible serious bodily injury to the shooter or an observer. Instead, if you have access to that data, use it only for observation of how the pistol works. Please enjoy the background information and technical specifications that are listed in this file.

This document was created from the Glock Armorer's manual (dated January, 1992), my own notes, and from discussions with Glock Factory personnel. This information was current as of the date of this document, listed above.

Neither Glock, the Glock Armorer who created this document, nor anyone who disseminates this document can be held responsible for any misinterpretation of the instructions in this manual that can lead to improper functioning of the pistol. This electronic manual is not from Glock, Inc. Glock does not warrant any of the information contained in this manual.

For additional information and service guidelines contact Glock for your nearest Glock certified field representative. This manual may contain errors. If in doubt on any information, contact Glock, Inc.

If you have a Glock but don't have a factory owner's manual, call them or write them. They will send you one for free. Many other firearms manufacturers will do this as well.

Any information put out by Glock, Inc. supercedes anything on this page.

*2. Introduction

All Glock pistols are a product of modern technology, incorporating many innovative design features which result in ease of operation, extreme reliability, simple function, reduced maintenance, durability and light weight.

Mr. Gaston Glock was the first person to successfully produce a polymer handgun receiver and marry it to a strong, all steel slide and barrel. In addition to new materials and manufacturing methods, the Glock pistol has an action which combines the best characteristics of the traditional double and single action pistols, creating

what has become known as the "Safe Action" system.

Safe, simple operation, reliability and accuracy were primary design criteria. To achieve safety with simplicity, three independent safeties sequentially disengage as the pistol's trigger is pulled to its rear-most position. These safeties automatically reset themselves once the shooter removes his finger from the trigger. Glock pistols combine the safety and simplicity of revolver-like operation with a constant double action trigger pull, high magazine capacity, rapid recovery, and the reduced recoil of a modern, semi-automatic pistol.

Maintenance of the Glock is extremely simple and straightforward. A unique feature of the Glock pistol is that all parts generally are interchangeable within the same model - no hand fitting, filing or polishing is required or advised.

The polymer frame provides several advantages. It is lightweight, rust proof, and it will not stick to flesh in cold weather. The polymer frame also reduces felt recoil by "bending" from the recoil of a round being discharged. The grip, for a double stack magazine, is narrower than would otherwise be possible since there are no externally attached grips to take up any additional space.

* The Exterior finish on Glock Pistols

Most of the metal parts on the Glock pistol receive a finish called Tenifer. This finish is applied to a depth of three thousandths of an inch. The Tenifer finish is rated at 69 on the Rockwell hardness scale. About the only thing harder than Tenifer is a diamond or carbide. The Tenifer finish on Glocks carbon steel slide resists corrosion much better than even stainless steel.

If you somehow manage to cut through the Tenifer finish, Glock cannot "Re-Tenifer" your pistol. It would be too brittle and the metal would be subject to cracking.

The finish you see on the exterior of the slide on a new Glock pistol is not the Tenifer finish. The Tenifer is a metal process, and is colorless. The dark exterior metal is a parkerizing type finish applied over the Tenifer finish. As the pistol is used and rubbed over a long period of time, this finish may wear off in spots.

Glock can refinish this "parkerizing" type of finish if you ever use your Glock often enough and long enough to wear it partly off. Contact Glock for details and prices.

(Ed. Note: I have worn my varied Glock pistols for over 5 years next to my (often sweaty) skin. I've never noticed any corrosion due to sweat or water, even on the small sections that have lost the dull parkerizing finish. These small areas appear to have a dull silver color).

The Tenifer finish insures very good rust resistance. The slide and barrel are tenifered. The internal components, any metallic sights, and the slide stop lever are not Tenifered.

Direction Note: The terms right and left, front (muzzle) & rear, top and bottom, up and down, and forward and backward as used in this paper refer to the pistol when being held in shooting position as seen by the shooter.

*3. Basic Firearm Safety Rules

- 1. Always keep the firearm pointed in a safe direction.
- 2. Handle all firearms as if they were loaded.

- 3. The trigger finger stays out of the trigger guard until the firearm is on target and the decision to fire has been made.
- 4. Make sure the firearm is in good working order and the barrel clear of obstructions.
- 5. Always check your target, backstop, and the surrounding area before firing.
- 6. Quality ear and eye protection should always be worn while shooting or observing.
- 7. When storing a firearm, the firearm should be unloaded, secured in a safe storage case and out of the reach of children and untrained adults.
- 8. Only use ammunition recommended by the firearm manufacturer and always check caliber and condition of ammunition before loading the firearm.
- 9. Firearm transportation is regulated by Federal, State, and local laws. Always transport your firearm in a safe, unloaded condition and in accordance with applicable laws.
- 10. Certain medications, alcohol, and firearms do not mix. Never allow anyone to use firearms when under the influence of drugs or alcohol.
- 11. The safe and rational use of a firearm relies on common sense and proper training of the user. Follow safety rules and think before using a firearm.
- 12. Thoroughly read and understand the users manual that is supplied with your firearm. Never use any firearm unless you completely understand its operation and safety features.

*4. Safety Features of the Glock

The Glock pistol has no conventional, externally-located safety lever. Therefore, make sure that the trigger is touched only when you intend to fire or when verified empty, in order to perform maintenance. Having said this, there seems to be a common misconception that the Glock has no safety. This is wrong; it actually has three:

1. Trigger Safety

The trigger safety is incorporated into the trigger (part #26) in the form of a lever, and in the untouched state blocks the trigger from being moved backwards.

To fire the pistol, both the trigger safety and the trigger must be depressed at the same time.

If the trigger safety is not depressed, then the trigger will not move to the rear and the pistol will not fire. This is designed to prevent the trigger from going to the rear when the pistol is dropped.

2. Firing Pin Safety

A spring-loaded pin (#9) projects into the firing pin cutout, and blocks it. This safety is only released while the trigger is pulled.

3. Safety Function of the Trigger Mechanism Housing

(Drop Safety)

The trigger bar is pushed onto the safety ramp by the firing pin.

The safety devices 1, 2, and 3 above are designed to prevent the weapon from unintentional discharge, if dropped from up to 6.5 ft., exceeding NATO standards.

Special Warning:

In case the trigger safety proves to be ineffective for any reason, Danger of an unintentional discharge exists. The weapon is to be immediately unloaded and restricted from further use. Make sure that your weapon is properly repaired and checked by Glock or a Certified Glock Armorer before using it again!

The beauty of these three Glock safeties is that once you start to squeeze the trigger, they disengage (numbers 2 & 3 progressively) until before the moment of firing, they disengage. Upon releasing the trigger (whether the trigger was actually pulled back far enough to fire) all three are automatically reapplied! Simple, yet pretty revolutionary.

I've also heard it mentioned that some believe the Glock is 'inherently unsafe' due to it's trigger design (they cited the trigger safety projection as 'not being heavy enough'). This isn't the purpose of the trigger safety! It is to help prevent Unintentional Discharge when the trigger edge is 'snagged' by something from the side. I haven't found Glocks to have any higher rate of unintentional discharge than Berettas, etc.

Basically it boils down to this very simple premise (which I was taught, and which I teach): keep your finger out of the trigger guard until you intend to fire! No slightly heavier trigger will replace proper training, and if you feel the stock five pound trigger is still too light, I (or any Glock Factory Certified Armorer) can swap that out for under a buck (at cost; assuming no labor charge) in under a minute for a New York or New York Plus trigger spring (which are approximately eight and twelve pounds, respectively; the latter heavier than some other Double Action semi-auto pistols).

*5. Technical Specifications

Glock currently has pistols in four calibers for shooters in the United States. They are the 9mm Parabellum, .40 S&W, 10mm, and the .45 ACP. Glock makes pistols in .380 ACP (also known as 9 x 17mm and 9mm Kurz) for markets outside the USA.

For the magazine capacity of all pistols listed below, the maximum legal capacity (in the USA) for post-Clinton Crime Bill (do you feel safer?) magazines is 10 rounds. Police and Military still receive full capacity magazines.

Glock 17 (9mm Full Size Pistol)		
	Metric	U.S.
Type of	Safe Action	
Action	(Double Action On	ly)
Caliber	9 x 19 mm (Parabe	llum)
Overall Length (Slide)	185mm	7.28"
Height w/ Sights	136mm	5.35"
Width	30mm	1.18"
Length Between Sights	165mm	6.49"
Barrel Length	114mm	4.49"
Barrel Rifling and	Hexagonal profile	with
Twist Direction	Right hand twist	
Length of Twist	250mm	9.84"
Magazine Capacity	17 / 19 with +2 e	extended magazine

Mass (Weight)

Empty w/o magazine	620g	21.91 oz.
Empty magazine (17 rds)	56g	2.08 oz.
Full Magazine (17 rds)*	~260g	~9.50 oz.
Muzzle Velocity *	~360 m/sec	~1180 fps
Muzzle Energy *	~500 J	~369 Ft. Lbs.
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)	

^{*} Varies depending on type of ammunition.

All specifications subject to change without notice.

Glock 19 (9mm Compact Size Pistol)

, ,		,
	Metric	U.S.
Type of	Safe Action	
Action	(Double Action On	nly)
Caliber	9 x 19 mm (Parabo	ellum)
Overall Length (Slide)	174mm	6.85"
Height w/ Sights	124mm	4.88"
Width	30mm	1.18"
Length Between Sights	152mm	5.98"
Barrel Length	102mm	4.02"
Barrel Rifling and	Hexagonal profile	e with
Twist Direction	Right hand twist	
Length of Twist	250mm	9.84"
Magazine Capacity	15 / 17 with +2	extended magazine
Mass (Weight)		
Empty w/o magazine	595g	20.99 oz.
Empty magazine (15 rds)	5 4 g	1.98 oz.
Full Magazine (15 rds)*	~240g	~8.55 oz.
Muzzle Velocity *	~360 m/sec	~1180 fps

Muzzle Energy *	~500 J	~369 Ft. Lbs.
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)	

^{*} Varies depending on type of ammunition.

Glock 17L (9mm Competition Pistol)		
	Metric	U.S.
Type of	Safe Action	
Action	(Double Action On	nly)
Caliber	9 x 19 mm (Parabo	ellum)
Overall Length (Slide)	225mm	8.85"
Height w/ Sights	136mm	5.35"
Width	30mm	1.18"
Length Between Sights	205mm	8.07"
Barrel Length	153mm	6.02"
Barrel Rifling and	Hexagonal profile	e with
Twist Direction	Right hand twist	
Length of Twist	250mm	9.84"
Magazine Capacity	17 / 19 with +2	extended magazine
Mass (Weight)		
Empty w/o magazine	666g	23.35 oz.
Empty magazine (17 rds)	56g	2.08 oz.
Full Magazine (17 rds)*	~260g	~9.50 oz.
Muzzle Velocity *	~360 m/sec	~1180 fps
Muzzle Energy *	~500 J	~369 Ft. Lbs.
Trigger Pull	~1.5kg	~3-4 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		

0.5"

for Discharge 12.5mm

* Varies depending on type of ammunition.

All specifications subject to change without notice.

Glock 20 (10mm Full Size Pistol)

	Metric	U.S.
Type of	Safe Act	ion
Action	(Double Action	on Only)
Caliber	10 mm	
Overall Length (Slide)	193mm	7.59"
Height w/ Sights	139mm	5.47"
Width	32.5mm	1.27"
Length Between Sights	172mm	6.77"
Barrel Length	117mm	4.60"
Barrel Rifling and	Hexagonal pro	ofile with
Twist Direction	Right hand to	wist
Length of Twist	250mm	9.84"
Magazine Capacity	15	15
Mass (Weight)		
Empty w/o magazine	784g	26.35 oz.
Empty magazine	65g	2.05 oz.
Full Magazine *	~325g	~11.92 oz.
Muzzle Velocity *	~370 m/sec	~1230 fps
Muzzle Energy *	~750 J	~575 Ft. Lbs.
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three	(3)

^{*} Varies depending on type of ammunition.

All specifications subject to change without notice.

Glock 21 (.45 ACP Full Size Pistol)

Metric	U.S.

Type of	Safe Action		
Action	(Double Action O	mly)	
Caliber	11.5 x 21.3 mm	.45	
Overall Length (Slide)	193mm	7.59"	
Height w/ Sights	139mm	5.47"	
Width	32.5mm	1.27"	
Length Between Sights	172mm	6.77"	
Barrel Length	117mm	4.60"	
Barrel Rifling and	Octagonal profil	Octagonal profile with	
Twist Direction	Right hand twist		
Length of Twist	400mm	15.75"	
Magazine Capacity	13	13	
Mass (Weight)			
Empty w/o magazine	745g	25.22 oz.	
Empty magazine	65g	1.98 oz.	
Full Magazine *	~340g	~11.78 oz.	
Muzzle Velocity *	~250 m/sec	~820 fps	
Muzzle Energy *	~460 J	~302 Ft. Lbs.	
Trigger Pull	~2.5kg	~5-8 lbs.	
Trigger Slack	10mm	0.4"	
Trigger Travel			
for Discharge	12.5mm	0.5"	
Number of Safeties	Three (3)		

^{*} Varies depending on type of ammunition.

All specifications subject to change without notice.

Glock 22 (.40 S&W Full Size Pistol)

Metric U.S.

Type of Safe Action

Action (Double Action Only)

Caliber .40 S & W

Overall Length (Slide)	185mm	7.28"
Height w/ Sights	136mm	5.35"
Width	30mm	1.18"
Length Between Sights	165mm	6.49"
Barrel Length	114mm	4.49"
Barrel Rifling and	Hexagonal pro	file with
Twist Direction	Right hand tw	ist
Length of Twist	400mm	15.75"
Magazine Capacity	15	15
Mass (Weight)		
Empty w/o magazine	645g	22.36 oz.
Empty magazine	53g	1.87 oz.
Full Magazine *	~300g	~10.62 oz.
Muzzle Velocity *	~300 m/sec	~984 fps
Muzzle Energy *	~520 J	~386 Ft. Lbs
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)

^{*} Varies depending on type of ammunition.

Glock 23 (.40 Compact Size Pistol)

		,
	Metric	U.S.
Type of	Safe Actio	n
Action	(Double Action	Only)
Caliber	.40 S & W	
Overall Length (Slide)	174mm	6.85"
Height w/ Sights	124mm	4.88"
Width	30mm	1.18"
Length Between Sights	152mm	5.98"

102mm

4.02"

Barrel Length

Barrel Rifling and	Hexagonal profile with	
Twist Direction	Right hand tw	ist
Length of Twist	400mm	15.75"
Magazine Capacity	13	13
Mass (Weight)		
Empty w/o magazine	597g	20.67 oz.
Empty magazine	52g	1.76 oz.
Full Magazine *	~260g	~9.35 oz.
Muzzle Velocity *	~300 m/sec	~984 fps
Muzzle Energy *	~520 J	~386 Ft. Lbs
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)

^{*} Varies depending on type of ammunition.

Glock 24/24P (.40 S&W Competition Pistol)

Metric U.S.

Type of Safe Action

Action (Double Action Only)

Caliber .40 S&W

Overall Length (Slide) 225mm 8.85" Height w/ Sights 136mm 5.35" Width 30mm 1.18" Length Between Sights 205mm 8.07" Barrel Length 153mm 6.02" Barrel Rifling and Hexagonal profile with

Twist Direction Right hand twist

9.84" Length of Twist 250mm

Magazine Capacity 15

Mass (Weight)

Empty w/o magazine	757g	26.70 oz.
Empty magazine (15 rds)	78g	2.75 oz.
Full Magazine (17 rds)*	~325g	~11.46 oz.
Muzzle Velocity *	~320 m/sec	~1050 fps
Muzzle Energy *	~598 J	~441 Ft. Lbs.
Trigger Pull	~1.5kg	~3-4 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)	

^{*} Varies depending on type of ammunition.

Glock 25 (.380 ACP Compact Size Pistol)

	Metric	U.S.
Type of	Safe Action	

Action	(Double Action Or	nly)
Caliber	9 x 17 mm	.380 ACP
Overall Length (Slide)	174mm	6.85"
Height w/ Sights	124mm	4.88"
Width	30mm	1.18"
Length Between Sights	152mm	5.98"
Barrel Length	102mm	4.02"
Barrel Rifling and	Hexagonal profile	e with
Twist Direction	Right hand twist	
Length of Twist	250mm	9.84"
Magazine Capacity	15	
Mass (Weight)		
Empty w/o magazine	570g	20.11 oz

z. 68g Empty magazine 2.40 oz. Full Magazine * ~204g ~7.20 oz. Muzzle Velocity * ~305 m/sec ~1000 fps Muzzle Energy * ~286 Ј ~211 Ft. Lbs. Trigger Pull ~2.5kg \sim 5-8 lbs.

Trigger	Slack	10mm	0.4"
Trigger	Travel		
for Di	ischarge	12.5mm	0.5"

Number of Safeties Three (3)

* Varies depending on type of ammunition.

All specifications subject to change without notice.

Glock 26 (9mm Sub-Compact Size Pistol)

160mm

103mm

Safe Action

6.29"

Metric U.S.

(Double Action Only) Action

Caliber 9 x 19 mm (Parabellum)

Overall Length (Slide) Height w/ Sights 4.04"

1.18" Width 30mm

Length Between Sights 138mm 5.43"

Barrel Length 88mm 3.46"

Barrel Rifling and Hexagonal profile with

Twist Direction Right hand twist

Length of Twist 250mm 9.84"

Magazine Capacity 10

Mass (Weight)

Type of

560g 19.75 oz. Empty w/o magazine

Empty magazine 56g 1.98 oz.

Full Magazine * ~180g ~6.35 oz.

Muzzle Velocity * ~347 m/sec ~1140 fps

Muzzle Energy * ~465 J ~343 Ft. Lbs.

Trigger Pull ~2.5kg ~5-8 lbs.

0.4" Trigger Slack 10mm

Trigger Travel

for Discharge 12.5mm 0.5"

Number of Safeties Three (3) * Varies depending on type of ammunition.

All specifications subject to change without notice.

Glock 27 (.40 S&W Sub-Compact Size Pistol)

Metric	U.S.

Action (Double Action Only)

Caliber .40 S&W

Overall Length (Slide) 160mm 6.29"
Height w/ Sights 103mm 4.04"

Width 30mm 1.18"

Length Between Sights 138mm 5.43"

Barrel Length 88mm 3.46"

Barrel Rifling and Hexagonal profile with

Twist Direction Right hand twist

Length of Twist 250mm 9.84"

Magazine Capacity 9

Mass (Weight)

Empty w/o magazine 560g 19.75 oz.

Empty magazine 60g 2.12 oz.

Full Magazine * ~205g ~7.23 oz.

Muzzle Velocity * ~291 m/sec ~955 fps

Muzzle Energy * ~495 J ~365 Ft. Lbs.

Trigger Pull ~2.5kg ~5-8 lbs.

Trigger Slack 10mm 0.4"

Trigger Travel

for Discharge 12.5mm 0.5"

Number of Safeties Three (3)

All specifications subject to change without notice.

Glock 28 (.380 ACP Sub-Compact Size Pistol)

Metric U.S.

Type of Safe Action

Action (Double Action Only)

^{*} Varies depending on type of ammunition.

Caliber	9 x 17 mm	.380 ACP
Overall Length (Slide)	160mm	6.29"
Height w/ Sights	103mm	4.04"
Width	30mm	1.18"
Length Between Sights	138mm	5.43"
Barrel Length	88mm	3.46"
Barrel Rifling and	Hexagonal profil	e with
Twist Direction	Right hand twist	
Length of Twist	250mm	9.84"
Magazine Capacity	10	
Mass (Weight)		
Empty w/o magazine	529g	18.66 oz.
Empty magazine	56g	1.98 oz.
Full Magazine *	~145g	~5.11 oz.
Muzzle Velocity *	~305 m/sec	~1000 fps
Muzzle Energy *	~286 J	~211 Ft. Lbs.
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)	

^{*} Varies depending on type of ammunition.

Glock 29 (10mm Compact Pistol)

Glock 2	29 (10mm	Compact I	Pistol)	
		Metric		U.S.
Type of		Safe	e Action	
Action		(Double	Action O	nly)
Caliber		10) mm	
Overall Length	(Slide)	172mm		6.77"
Height w/ Sight	S	110mm		4.33"
Width		32.5mm		1.27"
Length Between	Sights	151mm		5.95"

96mm

3.78"

Barrel Length

Barrel Rifling and	Hexagonal profil	e with
Twist Direction	Right hand twist	:
Length of Twist	250mm	9.84"
Magazine Capacity	10	
Mass (Weight)		
Empty w/o magazine	700g	24.69 oz.
Empty magazine	68g	2.40 oz.
Full Magazine *	~235g	~8.29 oz.
Muzzle Velocity *	~370 m/sec	~1230 fps
Muzzle Energy *	~750 Ј	~575 Ft. Lbs
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)	

^{*} Varies depending on type of ammunition.

Glock 30 (.45 ACP Compact Pistol)

010011 30 (.13 11	er compace ribcor	,
	Metric	U.S.
Type of	Safe Action	
Action	(Double Action Or	nly)
Caliber	$11.5 \times 21.3 \text{ mm}$.45
Overall Length (Slide)	172mm	6.77"
Height w/ Sights	110mm	4.33"
	121mm	4.76"
Width	32.5mm	1.27"
Length Between Sights	151mm	5.95"
Barrel Length	96mm	3.78"
Barrel Rifling and	Octagonal profile	e with
Twist Direction	Right hand twist	
Length of Twist	400mm	15.75"
Magazine Capacity	9/10**	*

Mass (Weight)		
Empty w/o magazine	680g	23.99 oz.
Empty magazine	68g	2.40 oz.
	71g	2.50 oz.**
Full Magazine *	~255g	~9.00 oz.
	~280g	~9.87 oz.
Muzzle Velocity *	~250 m/sec	~820 fps
Muzzle Energy *	~460 J	~302 Ft. Lbs
Trigger Pull	~2.5kg	~5-8 lbs.
Trigger Slack	10mm	0.4"
Trigger Travel		
for Discharge	12.5mm	0.5"
Number of Safeties	Three (3)

^{*} Varies depending on type of ammunition.

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** The G-30 comes standard with what I refer to as the "+1 mag"; it has a longer floorplate on it than the standard size. The specs for the "+1" are listed second, when there are two specs listed. The other is for the optional, flush fit 9 round magazine.

All specifications subject to change without notice.
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Note that trigger pull weight can be approximately 5, 8, or 12 lbs. when the pistol has a standard, "New York", or "New York Plus" trigger spring installed.

Also, the connectors that are rated at 3.5, 5, and 8 lbs. will change the trigger pull characteristics.

All non-competition Glock models are shipped from the factory with the 5 pound connector. The 3.5 pound model is shipped in the competition models, and is only available in them (Glock will not sell these individually, at least in the USA). The 8 pound connector is available by special order.

*6. Ammunition Specifications for Glock Pistols

Glock pistols are designed to be fired with NATO or SAAMI specification ammunition. Therefore the following guidelines and specifications are provided so that proper ammunition will be selected for use in Glock pistols to assure proper functioning.

Any deviation from these specifications may lead to improper functioning and possibly void the warranty on Glock pistols.

Glock 9mm pistols will function properly with the new generation of 9x19mm ammunition including all +P+ and 147 grain subsonic ammunition currently in use or being introduced in the United States.

Minimum (lower limit) specifications for 9mm Ammunition to be used in Glock Pistols:

```
Bullet Weight 115 grains / 7.5 grams

Muzzle Velocity 1180 fps / 350 meters/sec
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Maximum (upper limit) pressures for 9x19mm ammunition to be used in Glock pistols should not exceed 43,500 pounds per square inch/ 3000 BAR.

Note that while there is no SAAMI standard for +P ammunition, the industry commonly loads the +P to slightly higher pressures than standard ammunition. +P+ ammunition is loaded to a yet slightly higher pressure. In tests I've run, the +P+ ammunition is not quite as high, interior pressure wise, as the 9mm NATO samples I've used from TZZ (aka IMI / Samson), Federal, or Winchester.

Handloaded/reloaded or re-manufactured ammunition may be unsafe and voids factory warranty.

There has been speculation by some that the use of lead bullets in particular should be avoided in Glocks due to the Polygon rifling. For more information on these thoughts, I will point you to a resource I did not write, the Glock kaBoom! Frequently Asked Questions, or, in shorter form, the kB! FAQ.

Ammunition Performance Data

(Compiled by Glock, Inc.)

```
Cartridge Manufacturer Bullet Weight Bullet Type Barrel Length
Muzzle Velocity Muzzle Energy
                                         Penetration
                                                           Expansion
                          147 gr/9.53g
                                                      4.25" / 107.9mm
9mm (FBI) Winchester
                                              JHP
902 fps/275 m/s 265.5 ft/lbs/360J 13.99"/355.3mm
                                                       .457"/ 11.6 mm
           Winchester
                          115 \text{ gr}/7.45\text{g}
                                             STIP
                                                      4.25" / 107.9mm
9mm
1091 fps/333 m/s 303.9 ft/lbs/412J 11.37"/288.8mm
                                                       .542"/ 13.7 mm
                          147 gr/9.53g
                                                      4.25" / 107.9mm
9mm
             Federal
                                          H-SHOCK
1062 fps/324 m/s 310.5 ft/lbs/421J 14.67"/372.6mm
                                                       .485"/ 12.3 mm
                                                          4" / 101.6mm
9mm (+P+) Winchester
                          115 \text{ gr}/7.45\text{g}
                                              JHP
1305 fps/398 m/s
                   437 ft/lbs/593J ~8.0"/203 mm
                                                        .600"/ 15.2 mm
9mm (NATO) Winchester
                          124 gr/8.04g
                                                          4" / 101.6mm
                                              FMJ
1185 fps/361 m/s
                   387 ft/lbs/525J
                                              N/A
                                                           N/A
```

1500 fps/457 m/s 440 ft/lbs/597J N/A N/A	nm
	nm
	nm
.40 S&W Winchester 180 gr/11.66g JHP 4" / 101.6mm	
990 fps/302 m/s 390 ft/lbs/529J 12.20"/309.8mm .650"/ 16.5 mm	nm
.40 S&W Federal 180 gr/11.66g H-SHOCK 4" / 101.6mm	nm
985 fps/300 m/s 384 ft/lbs/520J 14.00"/355.6mm .690"/ 17.5 mm	nm
.40 S&W Winchester 155 gr/10.04g STIP 4" / 101.6mm	nm
1205 fps/367 m/s 500 ft/lbs/678J 12.70"/322.6mm .600"/ 15.2 mm	nm
.40 S&W Federal 180 gr/11.66g JHP 4" / 101.6mm	nm
985 fps/300 m/s 384 ft/lbs/520J N/A N/A	
10mm (FBI) Federal 180 gr/11.66g JHP 5" / 127mm	
931 fps/284 m/s 346.4 ft/lbs/470J 17.24"/437.8mm .547"/ 13.9 mm	nm
10mm Winchester 180 gr/11.66g JHP 5" / 127mm	
955 fps/291 m/s 364.5 ft/lbs/494J 16.61"/421.8mm .526"/ 13.4 mm	nm
10 /11 00 777	
10mm Norma 170 gr/11.02g JHP 5" / 127mm	
1358 fps/414 m/s 696.1 ft/lbs/944J 18.44"/468.4mm .562"/ 14.3 mm	nm
10mm Hornady 155 gr/10.04g JHP N/A	
1410 fps/430 m/s 692 ft/lbs/938J N/A N/A	
1110 1987 130 1171 1771	
10mm Hornady 200 gr/12.96g FMJ N/A	
1150 fps/351 m/s 595 ft/lbs/807J N/A N/A	
.45 ACP Remington 185 gr/11.99g JHP 5" / 127mm	
903 fps/275 m/s 334.9 ft/lbs/454J 22.21"/564.1mm .540"/ 13.7mm	n

```
5" / 127mm
.45 ACP
             Federal
                         185 gr/11.99g
                                             JHP
                   373 ft/lbs/506J
                                       13.62"/345.9mm .623"/ 15.8mm
953 fps/291 m/s
                                                         5" / 127mm
.45 ACP
          Winchester
                         185 gr/11.99g
                                            STIP
951 fps/290 m/s 371.5 ft/lbs/504J
                                       13.58"/344.9mm .619"/ 15.7mm
.45 ACP
                                                         5" / 127mm
             Federal
                         230 gr/14.90g
                                           H-SHOCK
802 fps/244 m/s 328.5 ft/lbs/445J
                                       18.28"/464.3mm .621"/ 15.8mm
.45 ACP +P
                         185 gr/11.99g
             Remington
                                                          N/A
                                             JHP
1140 fps/347 m/s
                   534 ft/lbs/724J
                                            N/A
                                                          N/A
```

Note: Performance levels may change when using different firearms.

Sources: Cartridge manufacturers and FBI.

My own personal experience with my Glocks and chronograph varies somewhat with these, but I have no idea of their test conditions. For instance, in the 9mm NATO, using Winchester or Federal, I get right at 1220 fps out of my G-17.

*7. Field Stripping the Glock Pistol

The Glock pistol is field stripped into five (5) basic pieces. These are the slide, the barrel, the recoil spring/recoil spring tube assembly, the receiver, and the magazine.

-- Prior to Field Stripping, Make Sure Pistol Is Unloaded!! --

Magazine Removal

- 1. Point the pistol in a safe direction (a safe direction is where no one can possibly be injured in the event of an unintentional discharge). Finger OFF of the trigger and OUT of the trigger guard.
- 2. Press in on the magazine catch, located on the left side of the pistol at the rear of the trigger guard.
- 3. Remove the magazine.

Note: The Glock pistol is designed so that the magazine catch can not easily be pressed unintentionally when the pistol is held in a proper shooting grip. For this reason you will have to rotate the hand a few degrees to be able to press the catch and release the magazine.

Safety Caution: Prior to further disassembly, with your finger off of the trigger and outside of the trigger guard, point the pistol in a safe direction, lock the slide open by pushing up on the slide stop lever with the shooting hand thumb while pulling the slide to the rear with the non-shooting hand. Once the slide is locked to the rear, both visually and physically (with your little finger) inspect the chamber of the pistol to be sure that the chamber is empty. Also, check the magazine well to be sure that a cartridge has not become lodged between the ejector and the walls of the magazine well. Once you are sure that the pistol is unloaded, continue with disassembly.

- 1. Once you have verified that the pistol is unloaded:
- 2. Pull back slide to release slide stop lever and close action.
- 3. Point the pistol in a safe direction.
- 4. Pull the trigger. You will hear the firing pin spring forward.

Note: The trigger must be in the rear most position for slide removal.

Slide Removal:

- 1. Hold the pistol in either hand (shooting hand is easiest for me Ed.) so that four fingers grasp the top of the slide and the thumb is curled under the backstrap of the receiver (the "curl" on the back of the grip). With these four fingers, pull and hold the slide back approximately 1/10th of an inch (2.5mm). (If you pull it too far back, the trigger will reset to it's forward position, and the pistol will need to be pointed in a safe direction and dry fired again to restart the slide removal Ed.)
- 2. At the same time, pull down and hold both sides of the slide lock using the thumb and index finger of your free hand (the slide lock is located above the trigger guard on the polymer receiver).
- 3. Push the slide forward (with the four fingers grasping the top of the slide) until it is fully separated from the receiver.

Note: Do not attempt to manipulate the trigger while the pistol is disassembled. Unless you are an Armorer and have received training on "Function Testing the Trigger Safety", covered later, you may damage the trigger mechanism.

Barrel Removal

Safety Caution: The recoil spring is under tension! During removal use care to control the recoil spring and/or recoil spring tube.

- 1. Push the recoil spring tube slightly forward while lifting it away from the barrel.
- 2. Remove the recoil spring tube and recoil spring.

Note: Glock introduced a combined recoil spring tube and recoil spring, with the nomenclature "Recoil Spring Assembly" in 1991. If you do not have a separate recoil spring tube and recoil spring in your Glock pistol, you have the newer modification.

The instructions will refer to a recoil spring tube and recoil spring; you may substitute "Recoil Spring Assembly" as appropriate. There is nothing wrong with the older version, however. Do not attempt to disassemble the one piece recoil spring assembly; it does not need to be disassembled and trying to do so will break it.

The Glock is now field stripped. The average user should not attempt to disassemble the pistol any further per Glock, Inc. Field stripping is all that is necessary for routine cleaning.

*8. Reassembling the Field Stripped Glock Pistol

Reassembly Note:

When installing the recoil spring tube and recoil spring, be sure that the back end of the recoil spring tube rests in the half moon cut in the bottom of the front barrel lug. If it is not properly seated and you reassemble the pistol, the recoil spring tube may be damaged.

Barrel and Recoil Spring Tube/Recoil Spring Reassembly

- 1. Lay the pistol slide upside down.
- 2. Grasp the barrel at the chamber. While raising the chambered end, move the barrel slightly forward.
- 3. Guide the muzzle of the barrel into the circular hole in the front end of the slide.
- 4. Install the recoil spring tube and recoil spring.

Slide Reassembly

- 1. Point the receiver in a safe direction.
- 2. Grasp the slide at the back.
- 3. Align the cutouts on the rear of the slide near the bottom with the forward slide rails on the polymer receiver.
- 4. Slide the slide back until you can engage the slide stop lever.
- 5. Engage the slide stop lever.

Note: Once the slide is locked to the rear, both visually and physically (with your little finger) inspect the chamber of the pistol to be sure that the chamber is empty. Also, check the magazine well to be sure that a cartridge has not become lodged between the ejector and the walls of the magazine well.

(Ed. note - try to get in the habit of a visual and physical inspection of all of your firearms now. It is easy to overlook something when using the eyes alone, and you can't rely on your eyes in anything but bright light)

- 1. Once you have verified that the pistol is unloaded:
- 2. Pull back slide to release slide stop lever and close action.
- 3. Point the pistol in a safe direction.
- 4. Pull the trigger. You will hear the firing pin spring forward.

The Glock pistol is reassembled.

*9. Magazine Disassembly / Reassembly

Caution: The magazine spring is under tension. Be sure to maintain downward pressure on magazine spring with your thumb while disassembling.

For all standard floorplates (that have no holes in the bottom and are not a "+2" floorplate), hold the magazine upside down in your shooting hand, thumb on the right side of the magazine near the floorplate, fingers curled around the magazine and touching the front of the magazine.

Press inward with the thumb and first finger as you press the magazine floorplate forward. As soon as the floorplate starts to move, reposition hand so thumb retains magazine spring.

Remove the floor plate, magazine spring, and follower.

To remove the floor plate (standard Glock magazines after 1990 were shipped with a new locking device in the form of a mag reinforcement plate) when equipped with the magazine reinforcement plate (floorplate has a hole in the bottom):

1. Insert punch into circular indentation in floorplate, push reinforcement plate up inside magazine tube, then remove floor plate the same way as the standard floorplate.

This is the official method on paper. A method I was taught at the Armorer's school which works on pre-ban (and those post-ban 10 round magazines) is (ASSuME-ing you're right handed):

- 1. Hold the magazine in your left hand, front of the magazine oriented up, floor plate by your thumb.
- 2. A 3/32" punch (the diameter of the famed Glock Armorer's Tool) or similar object for the right hand.
- 3. With said punch, push in the button on the bottom of the magazine.
- 4. Place one of the rear corners of the floorplate against your tabletop.
- 5. Press the corner into the tabletop. The floor should start to slide forward.

It helps to squeeze in the sides of the magazine body near the floorplate.

The magazine tube, the follower, the floor plate (if so equipped), and the magazine spring may be cleaned. Do not lubricate anything within the magazine. Insure that all surfaces are wiped dry after cleaning and before reassembly.

To reassemble the magazine, locate the magazine spring. Place the larger diameter end of the magazine spring on the table top. Reattach the magazine follower to the top (narrow) end of the magazine spring.

Place the magazine larger end down on the table top. Note which way the magazine and the magazine spring "lean" while their bases are flat on the table top. Insert the magazine spring and attached follower into the magazine tube so that they are leaning the same way. The magazine follower should have the caliber stamp visible to the front of the magazine feed lips (when viewed from the top of the magazine).

Reinsert the reinforcing plate (if so equipped) in the magazine tube below the base of the spring. You will then have to carefully compress the magazine spring at the bottom of the magazine tube. Slide the floorplate back onto the magazine tube fully to complete the reassembly process.

You may also determine if your Glock magazine is a "drop-free" model or the original "non-drop-free" type. Look at the top back of the magazine. You will see either a rectangular notch or a semi circle cut out of the magazine. If it is a semi circle, the magazine is an original style, non "drop-free" type. If it is rectangular, it is a newer "drop-free" model. Incidentally, the Glock 26 and above never had a "non-drop-free" type; they are all the drop-free variety.

With the slide, barrel, recoil spring tube, recoil spring, polymer receiver, and (disassembled) magazine, the Glock pistol is completely field stripped. Further disassembly is not required for normal cleaning and maintenance. Further disassembly should be completed only by a Glock Certified Armorer.

*10. Preventative Maintenance:

Note: You must field strip the pistol to perform Preventative Maintenance.

The Glock pistol requires periodic cleaning to insure proper function. Once field stripped, the barrel and the chamber are easily cleaned from the chamber end. Do not clean the barrel from the muzzle (front) end. Doing so is probably the leading cause (for the average shooter) of "wearing out" any barrel.

The inside of the slide and receiver should be wiped clean. Standard firearm solvents can be used on the pistol (I recommend Break-Free CLP; it is what is used at Glock H.Q.; -never- use WD-40 on any firearm - Ed.). This will insure proper functioning of a new Glock pistol.

The copper colored lubricant that is found on portions of a new Glock slide should not be removed, as it will assure long-term lubrication of the slide.

As with any semiautomatic pistol, Glock pistols should not be cleaned by merely locking the slide to the rear and inserting the cleaning rod from the muzzle end. This can (and will for sure, eventually - Ed.) cause excessive amounts of solvents to build up in both the frame and slide, and possibly contribute to malfunctions of the pistol. The pistol should be field stripped every time it is cleaned.

(Note: We're talking about gummy build up in the internal firing pin channel of the slide. If it becomes gummy in there, the firing pin will be slowed down or blocked and may not set a round off reliably. The other problem is possible primer contamination by an oil or solvent that gets on the primer. If the primer gets contaminated, the round won't go off. This applies to any semiautomatic pistol - Ed.).

(Make sure when you clean the breech face that the slide is muzzle down (so gravity directs crud away from the firing pin hole); I don't like to introduce solvents or oils here, either. Bad news - Ed.)

The inside of both the chamber and barrel should be wiped completely dry once they have been thoroughly cleaned. The breech face and the area under the extractor claw should be both absolutely dry and free of any debris after cleaning.

The slide rail cuts should be cleaned thoroughly by using a clean patch on the end of a toothbrush-type cleaning tool.

With the clean patch wrapped over the brush portion of the toothbrush, thoroughly clean the slide rail cuts of all debris and solvents.

All other areas of the slide and frame (polymer lower receiver) should be checked for cleanliness. Most parts in the frame are accessible and can be wiped with a clean, soft cloth that has been very slightly dampened with a quality firearm cleaning solvent.

After the parts in the frame have been cleaned, they should be wiped dry with a clean, soft cloth. All solvent should be wiped from the parts so that they are clean and dry.

*11. Lubricating the Field Stripped Glock Pistol

To properly lubricate your Glock pistol after it has been thoroughly cleaned and dried, use a clean patch that has been very slightly dampened with a quality gun oil.

Wipe the barrel and the barrel hood (the front of the square piece's top edge at the chamber end of the barrel). Wipe the inside of the slide where the barrel hood rubs against the slide, and inside the ring on the muzzle end of the slide.

You can take one drop of oil on your finger and rub each slide rail, or put one drop of oil in each slide rail cut. Once the slide is moved on the receiver after reassembly, the oil drop will be distributed equally in the slide rails by moving the slide.

Note: There is one most important point to lubricate (with one drop of quality gun oil) (I prefer Break-Free CLP - Ed.). You must lubricate the point where the trigger bar meets the connector. This is towards the back of the polymer receiver on the right side; (see Function Testing the Trigger Safety before pulling the trigger when the pistol is disassembled) - when you pull the trigger you can see where the back of the trigger bar rubs on the connector. Repeating, it is most critical that this point be very lightly lubricated.

*12. Dry Firing the Glock Pistol

It is perfectly safe and normal to dry fire the Glock pistol when it is assembled.

However, when the pistol is disassembled, do not pull back on the back lug of the firing pin and let it snap forward. This can damage the firing pin and/or the firing pin safety. This condition can only be created by hand with the pistol disassembled.

Do not put any oil or solvent inside the firing pin channel or in the magazine / magazine tube. The firing pin channel, the magazine tube and other magazine components, and the breech face should be wiped completely dry before reassembly.

Leaving solvent or lubricant in these areas could cause contamination of primers and failure to fire (plus it attracts carbon and crud like a magnet - Ed.).

*13. Function testing the Glock safeties

Function Testing the Trigger Safety

Once the slide is removed from the receiver the trigger safety can be function tested in the following manner. Look at the right side of the pistol. At the very top just behind the trigger a small piece of metal is sticking up from inside the polymer receiver that is part of the trigger bar.

Push forward on this vertical extension of the trigger bar until the trigger is in its forward position. If you then let go of the vertical extension, the trigger should remain in it's forward position. This verifies the proper function of the trigger safety.

Do not pull the trigger after the slide has been removed, as the trigger safety is resting against the rear of the frame. This can damage the trigger safety by breaking off the portion of the trigger safety that actually prevents the improperly touched trigger from moving to the rear.

Also, do not pull the trigger when the slide is on the pistol, the trigger is in its forward position, and the slide is held to the rear with the slide stop lever. This can also damage the trigger safety.

Both of these are artificial conditions that do not occur during normal firing.

Glock pistols - Function Testing the Firing Pin Safety

The firing pin safety is on the underside of the slide near the breech face. It is a metal circle approximately 4 mm across. Hold the slide in a muzzle down position and depress the firing pin safety. The firing pin should move forward and the firing pin nose should be visible protruding through the firing pin hole. The firing pin may need to be pushed forward when the pistol is new so that it will protrude from the firing pin hole.

A second method of checking the firing pin safety for proper free movement is to depress the firing pin safety and shake the slide. With the firing pin safety depressed the firing pin should be heard moving freely back and forth. When the firing pin safety is not depressed, the firing pin should be nearly silent.

Next, make sure that the firing pin safety is properly engaged. Locate the firing pin extension on the underside of the slide near the rear. Hold the slide at the rear and push the firing pin extension towards the muzzle (front) of the slide. The firing pin should not protrude through the firing pin hole. If it does, the firing pin and firing pin

safety should be replaced by a Glock Certified Armorer.

If the firing pin does not move freely back and forth and you don't have a new Glock, the firing pin channel could be clogged with debris. Have a Glock Certified Armorer clean the firing pin channel (this requires complete disassembly of the slide and is therefore an Armorer's task).

Most debris collects in the firing pin channel due to improper cleaning. NEVER spray anything into the firing pin hole. ALWAYS field strip your pistol and clean the barrel from the breech end (while separated from the pistol).

Function testing the Drop Safety

This safety is an internal "stepped shelf" system that requires the trigger be pressed to the rear in order for the firing pin to be released (so it can spring forward discharging a round of ammunition). There is no user test for this safety.

*14. A word on different type of Glock Trigger pulls

Glock pistols are normally shipped from the factory with a standard 5 lb. trigger pull. This is fine for most users.

There are two items that combine to make up the Glock Trigger pull. These are the Connector and the Trigger Spring.

Glock pistols normally come with the 5 lb. Connector and a standard 5 lb. coil type Trigger Spring. With the standard 5 lb. Connector in place, two additional trigger pulls are available. The 8 lb. leaf type Trigger Spring is commonly called the New York Trigger Spring. This spring increases the 5 lb. trigger pull to 7.5 - 8.5 lbs.

The second or stronger version of the leaf type spring is commonly called the New York Plus Trigger Spring. This spring increases the 5 lb. trigger pull to 9-11 lbs., making it more similar to a double action revolver type trigger pull.

The 8 lb. connector is only used with the 8 lb. coil type Trigger Spring. The difference between the 8 lb. coil Trigger Spring versus the 8 lb. New York Trigger Spring is that the NY version has continuous resistance through the whole arc of the trigger pull. The coil version is more like the traditional two stage pull in that the first part of the pull is long but relatively "lighter", and the full resistance is only found more towards the rear of the trigger pull.

The New York type triggers originally had leaf type spring. The newer variants have coil type springs. An original New York 8 lb spring was black and had no + sign on it. Some original New York Plus springs were black, and later white. They both had a + symbol on them.

The new coil type NY triggers are Olive Green for 8 pound and Orange for 12 pound.

Glock also offers a 3.5 lb Connector for their Competition Models, the 17-L, 24, and 24-P. This provides a very light and easy trigger pull and is designed for competition shooting only. This trigger weight is not suitable for defensive pistols and is not available on any model other than a Competition Model. It is the standard (and only) trigger available on the Competition Models.

You can have your trigger pull "adjusted" to a standard 5 or 8 lb coil type, or an approximate 8 or 10 pound New York type trigger pull by a Glock Certified Armorer.

*15. A Word about Barrel types

The barrel in Glock pistols is forged from a single piece of metal. It is placed on a mandrel and the rifling is literally "hammered" made, taking the shape of the mandrel, which at Glock is polygonal.

The Glock pistols use polygonal rifling instead of traditional "cut" rifling. There are no lands and grooves as such in the barrel. All Glock pistols except the Model 21 use Hexagonal polygon rifling. The Model 21 uses Octagonal polygon rifling due to the larger barrel contact area of the .45 ACP bullet.

Polygon rifling provides several important advantages. It is easier to clean since there are no square indentations for powder and copper/lead fouling to accumulate in.

When compared to cut rifling, polygon rifling does not deform the projectile as much when the barrel "grips" it during passage down the bore. This increases accuracy because a more deformed bullet does not fly as accurately as a less deformed bullet.

The polygon rifling also lets less of the expanding gasses "blow by" (actually around) the projectile. This is because of the inherently tighter fit of the angle of the barrel to the projectile. Velocity is higher with a polygon rifled barrel versus a cut rifled barrel, all other variables (length, etc). being equal.

The side benefit of this higher velocity is greater energy from the same round from a Glock barrel versus a traditional barrel.

Glock barrels receive the Tenifer finish both inside and out. This finish allows them to have a much longer than normal barrel life. (Ed. Note: A firearms writer of some repute, Chuck Taylor, has completed an over 75,000 round test on a Glock 17. At the end of the test, the Glock was still shooting average groups of less than 3 inches with all types of ammunition from a ransom rest at 35 meters. This is astounding barrel life. Most pistols have no rifling by the throat after 10 or 15 thousand rounds).

*16. Glocks Sights

The Glock pistols use either a standard Polymer Sight (fixed or adjustable) or a fixed metallic Trijicon or Meprolight night sight. My recommendation on installing the sights (and adjusting the fixed varieties): this task is best left to a Glock Certified Armorer or a competent gunsmith.

Sight installation (and fixed sight adjustment) require a special sight pusher tool made by Glock. Attempts to drift the rear sight, such as with a brass or plastic hammer and punch, will break the sight.

(Ed. note - If you try it, you'll then have to purchase a new sight, as well as have it installed for you anyway. Save the trouble and get it done right; my sights have never needed adjusting after the initial adjustment)

(Ed. note continued - I do not like the plastic adjustable sight at all. I believe it is too fragile for duty use. I prefer the fixed plastic sight to the adjustable for any duty/defensive use. I much prefer the metallic Trijicon Night Sights to any of the plastic varieties. It may not be the best target sight, but it's a good three dot type combat sight).

Glock polymer rear sights come in five varieties. They are:

	7.3 / 0.29"	Highest impact
		High Impact
	6.9 / 0.27"	Standard on .45, 10mm models
	6.5 / 0.256"	Standard on 9mm, .40 S&W models
	6.1 / 0.24"	lower impact
(blank)	6.1 to 7.3/	click adjustable rear sight
	0.20" to 0.29"	

Note: If you want to shift the point of impact on your target to the left, you have to move the rear sight to the left and vice versa for the right (left and right in muzzle direction).

Action Needed

Left of Center	Move rear sight right
Right of Center	Move rear sight left
Low	Have higher rear sight installed
High	Have lower rear sight installed

Each change in the fixed sight increment results in a 3" change in round impact at 25 yards.

*17. Service Procedures and Trouble Shooting

Point of Impact

(Note: an asterisk (*) in the Correction column means that a Glock Certified Armorer needs to perform this task)

```
-- Stoppages --
Observed Problem Probable Causes Corrections
```

Fail to Extract	Extractor Worn/Broken/	Replace
	Missing	
	Over-powered, Under-	Change Ammunition
	powered, or defective	

ammunition

Clean extractor and
check function
Clean Chamber
Lock shooting

unlocked wrist hand wrist

Fail to Eject /	Broken/damaged ejector	*Turn in to Armorer
Erratic ejection		(replace trigger
(including stove		mechanism housing w/
pipes)		ejector)

Under-powered Ammunition	Change Ammunition
Dirty chamber	Clean chamber
Shooting with an	Lock shooting
unlocked wrist	hand wrist
Lack of lubrication	Lubricate
Dirty gun	Clean

Replace

Failure to Feed	Magazine not properly	Reinsert magazine
	inserted	
	Under-powered Ammunition	Change Ammunition
	Dirty chamber	Clean chamber
	Shooting with an	Lock shooting
	unlocked wrist	hand wrist
	Tight Extractor	*Turn in to Armorer
	Deformed magazine	
	(magazine sides or lips	Replace magazine

deformed / dented)

Weak recoil spring

Slide fails to lock open after last round

Magazine follower broken Replace follower

Clean and inspect

Dirty Magazine

Magazine

Weak Magazine Spring

Replace if necessary

Worn slide stop lever

*replace

notch

Dirty gun

Clean

Needs lubrication

Lubricate

Deformed magazine

Magazine sides deformed

by trying to load too

many rounds - replace

magazine

Under-powered Ammunition Change Ammunition

Shooting with an

Lock shooting

unlocked wrist

too far

hand wrist

Trigger pin inserted

*The trigger pin may be

inserted too far to the

left. This can cause

the spring on the slide

stop lever to bind.

Check to see if the

slide stop lever moves

freely. If not, press

the trigger pin slightly

to the right until the

slide stop lever moves

freely.

Slide stop lever worn

Inspect and replace

or damaged

if necessary.

--Failure to Fire--

No primer strike

Slide out of battery

(DON'T force into

battery) due to:

Deformed/defective round Inspect and replace round Under-powered Ammunition Change Ammunition Damaged/weak recoil Replace recoil spring spring Damaged recoil spring Replace recoil spring tube tube Shooting with an Lock shooting unlocked wrist hand wrist Barrel, slide, and Field strip and clean receiver mating surfaces are excessively dirty Gun dirty / obstructed Clean chamber chamber Hard primer (Submachine Change Ammunition Gun ammunition) *Remove, inspect and Obstructed firing pin channel clean firing pin and firing pin spring. Clean firing pin Channel. Connector loose in *Replace housing housing Pistol excessively dirty Field strip and clean Wrong trigger bar *Replace Connector needs Lubrication Field strip and oil. Trigger bar is bent or *Replace trigger bar damaged Improperly stored in *Replace Trigger Bar.

Light, centered

--Inconsistent

release--

trigger pull or

trigger will not

strike

--Trigger safety Improperly stored in *Replace Trigger Bar.

fails to return to original box with When stored in original

forward/engaged	trigger in full forward	box, pistol must be
position	position (trigger	unloaded, trigger in
	safety fully depressed)	back position.
Firing pin fails	Damaged, worn, or	*Replace both firing pin
function test as	defective firing pin	and firing pin safety
described in this	safety	
manual		
No primer strike	Worn or broken firing	*Replace
	pin tip.	
	Obstructed channel.	*Clear
	Spring cups inverted.	*Change
Light off center	Tight extractor	*Change
strike	Dirty gun	Field strip and clean
	Slide Lock reversed or	*Replace
	not beveled.	
Locks open early	Improper hand position	Change grip
	Reverse tension on	*Replace
	slide stop lever spring	
	Damaged slide stop lever	*Replace

*18. Special Features of the Glock 17

The Glock 17, NATO Stock Number 1005/25/133/6775, is a versatile pistol. It may be equipped with an optional set of maritime spring cups. These are two small parts within the firing pin assembly. The maritime spring cups are only available from Glock by special order, and are not included on any Model 17 sold by Glock.

Warning: **Do not attempt to do the following!** It is an extremely dangerous activity. This information is included only to show the versatility and Special Warfare uses of the Glock 17 pistol. Following these instructions can lead to serious bodily injury or death.

Note: Glock and this Glock Armorer specifically disclaim any liability from anyone attempting to perform or performing underwater firing. This is only for trained personnel wearing proper equipment to protect themselves from the effects of firing ammunition underwater. You have been warned!

The Glock 17 pistol is capable of firing repeatedly while submersed under water. The action will cycle reliably, if a little bit slower while submersed. NATO specification ammunition, such as Winchester's Ranger RA9124N, with waterproof sealed primers and case mouths is recommended.

This applies only to the Glock 17 pistol. Never attempt to perform any underwater firing with any other Glock pistol than the Model 17 as the pistol may literally blow up. Only the Glock 17 was designed and intended to accept modified spring cups to perform underwater firing, and only the Model 17 is designed to remain within acceptable pressure limits when fired underwater. The other pistols all generated too much internal pressure upon firing to be safe, especially the .40 S&W pistols.

The maritime spring cups insure that water can pass by the firing pin within the firing pin channel. These spring cups prevent the creation of any hydraulic force within the firing pin channel (which would slow the firing pin down, causing lighter primer strikes).

The user of the Maritime spring cup-equipped Glock must keep several things in mind. They must use only full metal jacket, ball type ammunition. This is because the water within the barrel of the submersed Glock 17 will spread the hollow point out within the barrel itself upon firing. The hollow point would cause further increased pressures by increasing the bearing surface of the bullet to the barrel.

It also would not be as accurate as it would expand further yet upon leaving the barrel, and would slow down very quickly while tumbling. Think of it as the bullet has entered ballistic gelatin. That is what the water is like in the barrel upon firing.

The Glock 17 also must be fully submersed underwater. There must not be any air left within the pistol. The user after fully submersing (himself and) the Glock 17 normally points the muzzle towards the surface of the water and shakes the Glock 17 vigourously to allow any air (especially in the barrel) to escape.

At least one specialized Scuba diving group regularly uses their Glock Model 17's to dispatch sharks where they dive. The Glock 17 using NATO specification ball ammunition will completely penetrate a minimum of one 1/2" pine board at a distance of ten feet from the muzzle when fired underwater.

The ability of the specially equipped Glock 17 is normally only of any use in some specialized warfare situations. It is included here only to show how this pistol is sometimes usable (and has been used) by various Special Warfare units.

(Pictures of this on my web pages are done by a properly trained Navy gentleman. Suffice it to say, having suited up and done this on numerous occasions myself, that the sound pressure underwater is distinctly worse than in air, and there are traumatic effects probable on several bodily organs within any unproperly protected human torso from the shock wave during firing. - Ed.)

To answer a question that have popped up on the glock-l and rec.guns net groups from time to time, is the G-17 audible above water when it is fired underwater?

This varies somewhat based on the gas volume of the particular load the operator is using. In testing with some east coast Seals, I found that if the G-17 was shot from at least five feet below the surface (or lowest wave trough), and the shot was at least parallel to, or away from the surface, then that shot was inaudible topside.

However, under water, the shot was audible for one heckuva long way. No mistaking that for something else for anyone who's ever heard it before. And I'd imagine anyone could guess it. The pressure waves are also felt for some distance away from the pistol, and they reverberate off of anything hard, and are absorbed rather well by a soft body (like a human's).

Pictures of underwater firing with my Glock 17 are over <u>here</u>.

*19. The Glock 18 Select fire Machine Pistol

The Glock 18 is a specialized model only available to police and the military. It is a selective fire machine pistol chambered for the 9mm Parabellum cartridge. It is based on the Glock 17. The dimensions of the slide, receiver, etc. of the Glock 18 have been specially modified so that they are not physically interchangeable with the Glock 17.

The Glock 18 fires from a closed breech position similar to the M-16 rifle and differing from the open bolt position of most earlier full automatic designs.

The cyclic rate of the Glock 18 using NATO specification ball ammunition is approximately 1200 rounds per minute. This is an extremely fast cyclic rate.

The Glock 18 was developed to fulfill a counter terrorism / executive protection role. It combines high firepower with concealability. The Glock 18 is normally carried with the 19 round "Plus-2" magazine, giving it a total of twenty rounds when fully loaded with a cartridge in the chamber. This provides for concealability.

A special extended magazine of 33 rounds capacity is available for the Glock 18. It extends downward from the butt of the pistol when fully inserted. This magazine is physically compatible with the Glock 17 and 19, but sales of the 33 round magazine are restricted to Law Enforcement Agencies and the military per Glock policy (even prior to the "Crime Bill" in the USA).

The selector switch itself is located on the left rear portion of the slide. It is a circular dial with a lever. The dial has two markings; a single dot at 11 o'clock and two dots at 7:30. When the dial is positioned at the single dot, the Glock 18 performs similar to a semi-automatic Glock 17. When the dial is positioned at the two dot setting, the pistol is in full automatic mode.

The Glock 18 was designed in part so that counter terror unit operators could wear the pistol concealed when on assignment. It is easily the best machine pistol I've ever fired.

*20. New Glock Models

In 1994 Glock introduced a new competition model chambered in .40 S&W. This model is designated the Glock 24. It is pretty much identical to the model 17-L with the exception of the caliber. It is also available in a ported barrel model (to minimize shot to shot recovery time and muzzle flip). It is designated the Glock 24C. I like the 24C and may well own one someday. It was a joy to shoot, having less perceived recoil w/ full power loads than even my G17! Even the muzzle flip was barely perceptible with major loads.

Glock has it's .380 pistols available only for sale in markets where the 9x19mm is forbidden to private citizens. I have seen the Glock 25, but not the 28. It was made in .380 because most European countries forbid private citizens to own anything chambered in the more powerful "military chamberings" such as 9mm Parabellum. US citizens, you're not missing anything here:)

Glock has just introduced the models 29 and 30, their compact big-bores, as of this version of the UGUM. Field reports are trickling in on the 30, and suggest that it has possibly even less perceived recoil than the G-21, if that is possible! As was the case with the 26 and 27, demand will very probably outrun supply of these new compact big-bore Glocks.

Glock is expected to come out with a carbine shortly. One person I know at Smyrna was appalled that Ruger

beat them to the punch with their carbine. This carbine will use the Glock pistol magazines of like caliber.

Up Until now, Glock had only one factory compensated handgun available on the market, the Glock Model 24C competition pistol. (originally, the 17-L also had cut compensator ports). But, that's all history now because Glock has introduces a new series of "C" line ("C" stands for compensated) handguns in 9mm, .40 S&W and .45 ACP.

The new Glock "C" model compensators are designed unlike any other compensators I've seen in the gun market. These come with two machined ports opposed at what "eyeball approximates" as a 25 degree angle offset to either side of the bore centerline.

The slide has two corresponding long slots located near the front sight (most compensators have in-line ports on the top center of the barrel and slide). As with all ports, these are also designed to reduce muzzle flip which allows for quicker on-target recovery. When field-stripped, the new compensated Glocks look exactly like their counterparts, with the exception of the port holes in the barrel and slide.

Glock's design of the compensator port slots on either side of the front sight is designed to help reduce muzzle flash in the shooter's direct line of sight and eliminates lessens the common fouling of the front sight.

Like the current Glock Model 24C, the new compensated Glocks will add the suffix letter "C" after the model number, i.e., 17C, 21C and 22C, to designate the modified pistols as opposed to giving them new model numbers. Hopefully if they introduce their .40 S&W pistols with .357 SIG barrels, they will follow this same pattern.

I personally doubt that Glock will introduce the C line in sub compact guise, so a 26C or 27C may not be on the horizon. But I've certainly been wrong before! And for now, it is uncertain if Glock will sell just the C barrel and slide (so you could upgrade your current Glock 9mm/.40 S&W/.45 caliber with the new components). I've gotten reports both ways, so we'll just have to wait and see on this one.

For those Glocksters like Mark Gibson, the man who runs the Glock-L mailing list, who are G-20 (10mm) afficionados, you may have to wait a while for your compensated model. Glock may "make it happen" if the other C models prove successful. Although it's a great caliber, it has always taken a back seat in the sales arena to it's big bore sibling, the .45 ACP.

(Ed. note - I would caution defensive users to forego the C model as a defensive pistol. It will lose some velocity, have more "flash" that the same non-compensated version, and may injure you if you are above the ports when it is fired. I've seen several students picking bits of jacket material out of themselves after firing when flesh was in line with the ports of other pistols! Until I can evaluate if the Glock is any better in this regard, I will ASSuME that it isn't, for safety's sake).

While I may not use a C model for defense or duty, I think it'd be neat for plinking and some competition uses. Cost of the new Glock "C" line models should be only a little more than the similar uncompensated model. The compensated models are currently becoming publicly available.

As to a Glock shotgun, I think it'd be neat, but not particularly feasible in the current US market. We are already beginning to heavily restrict our semi-auto "mean looking" shotguns, as well as limiting their capacity. This will probably not look like a good investment to Herr Glock.

One thing I think (and hope) we will eventually see is a Glock .22 pistol. It would be a perfect woods gun, in my opinion, and would be a good addition on fishing trips as well. I would also love a conversion kit or top to make current big bores able to plink with the familiar .22 rimfire fodder.

*21. Miscellaneous Glock History and Facts

First, some background and history, and we'll start letting loose with the factoids as we wade in. The Glock Model 17 was successfully introduced in 1983 by Gaston Glock, engineer and founder of Glock Ges. m.b.H., located in Deutsch-Wagram, Austria. Mr. Glock's company was established in 1963 and had previously manufactured a variety of commercial appliances as well as various police and military related products (including special warfare hand grenades, and durable, lightweight bayonets and entrenching tools).

Having never before designed or manufactured a firearm, Glock assembled a brilliant panel of gun designers and experts from around the world to design a new handgun for evaluation and testing by the Austrian Army. Many other major firearm's manufacturers had also bid on the same contract to provide 25,000 9mm semi-automatic combat handguns. This bid required that every competing handgun pass an initial screening process. Thereafter, the remaining qualified handguns would be rigorously tested.

Part of the design specification included the requirement that the pistol parts be completely interchangeable. Glock had no problem here; no part is hand fit on any Glock model. The first prototype handgun submitted by Glock not only passed the initial screening, but in typical Glock style, vastly exceeded the rigorous test requirements that followed.

Prior to 1983, Glock applied for a bid to provide 25,000 handguns for the Austrian army. Having never before designed or manufactured a firearm, Glock assembled a brilliant team of gun designers and experts from around the world to design a new handgun for evaluation and testing by the Austria army. Glock did some innovative things because he didn't know that "that's impossible!"

The original Glock pistol, the model 17, is simple but innovative handgun. It not only represented possibly the most exciting and successful idea in handgun history, but soon developed a trendsetting design that included a limited number of components (initially only 32), a new safe-action system with soft recoil, and low weight through the use of space-age polymers that are stronger than steel at only 14% of the weight. The Glock pistol frame can also withstand extremely high and low temperatures without structural damage.

Glock handguns are among the finest combat-ready handguns that exist today. Originally designed in the early 1980's for the Austrian military by plastics expert Gaston Glock and a team of handgun experts, Glock pistols have taken the world by storm. They represent perhaps the most important breakthrough in handgun technology since the Colt .45 1911. Since their introduction in the U.S. in 1986, Glock pistols have been adopted as issue weapons for more than an estimated 60% of the law enforcement agencies in the United States, and are in use worldwide by law enforcement and military units alike.

With 1986 as the start point for Glock, Inc. in the USA (in Smyrna, Georgia, what I saw as a pleasant suburb of Atlanta) & the introduction of the Glock pistol to US shooters (in 1996 Glock celebrated their tenth anniversary in the U.S.A.)

Although they are sometimes disparagingly referred to as "Combat Tupperware", their frames are sturdier than almost any other pistol design out there. I must admit I was one of the people laughing at Glocks when they hit the U.S.A. although I've atoned for my sin now <grin>.

Glock pistols were probably first known for the controversy surrounding them when they were first introduced to the United States. Specifically, Glocks were the first of the commercially successful "Plastic Guns", and many myths and half-truths about the guns were spread by a few influential people, and reinforced in other ways, such as by Hollywood and our media.

Glock frames and a few other assorted pieces are made of high strength polymer (aka plastic). To many

ill-informed people, this made the Glock the "perfect terrorist weapon", as it would be "undetectable by metal detectors". Bruce Willis's character in the movie "Die Hard" didn't help, when, during a Glock's first known appearance in motion pictures, referred to the fictional "Glock 7" (it was a 17) as a "ceramic gun" and implied that it was used extensively by terrorists to hijack planes.

Glock slides, barrels, and many other parts are steel, and even the plastic frame has steel pieces molded into it. They can and are detected by metal detectors. I've had this debate with others who insisted they knew how it works. I usually save my introduction for last.

There is far more metal in a Glock pistol than in many small semi- automatics. The plastic frame is even readily apparent on any airport x-ray machine! And what good would it do, even if it were "undetectable", without some cartridges to fire? (one 9mm round will set off airport metal detectors, and is certainly readily visible under an x-ray machine)

Today, most (though by no means all) of the "Plastic Gun" paranoia has gone way. It's a tribute to Glock's sucess that the newest models of pistols from respected handgun companies such as Heckler & Koch, Ruger, and Smith & Wesson are all plastic-framed guns. S&W's Sigma series is nearly an exact copy of the Glock, with numerous parts being interchangeable (and the subject of a lawsuit, which, in this case I believe is justified and that Glock will win).

While Colt's entry into the plastic framed world did not fare well, I believe that if the rumored plastic version of a compact Sig Sauer takes to the market, it will do well also.

In the U.S., Congress actually tried to ban importation of the Glock. The media (as already mentioned, and namely the television press) were quick to attack what they referred to as the "plastic" Glock because they wanted to believe that it could escape detection by our airport screening equipment. Others in the media attacked it saying that it was the handgun most preferred by terrorists. Soon, the Democratic Congress added to the confusion and tried to enact several unsuccessful Bills to totally ban the importation of all "plastic" handguns, including Glock pistols, into the U.S.

Currently, there seems to be a disappointing return to this, with Senator Barbara boxer introducing similar legislation, calling any pistol that melts below around 800 degrees Fahrenheit a "junk gun" and banning it's possession. I only hope you fellow gun owners will <u>stand up for your rights</u>, too. (of course, there would be an exemption for the police (Argh!), since this would disarm well over half of all police in the United States).

However, before the Glock 17 could initially be sold here, it had to be approved for importation into the United States by the Bureau of Alcohol, Tobacco and Firearms (BATF). Glock quickly made the few required changes (mostly additions) to the Glock 17 and the rest, as they say, is history. Having withstood all the bad press and more, Glock is now the fastest selling handgun in the U.S. and the duty weapon most preferred by U.S. law enforcement.

Another source of Glock controversy is their unique "Safe-Action" safety system. I usually get a couple of questions on this a week. Unlike traditional Single or Double Action, Glocks do not have an external manual safety lever, an exposed hammer, or a decocker. Instead, Glock employs three internal safety mechanisms, all activated and deactivated via the trigger, that prevent the gun from firing in the event that the gun is dropped or banged around.

First, the firing pin is not "cocked" unless the trigger is depressed, which compresses the trigger spring. Second, there is a firing pin safety that blocks the movement of the firing pin, so even if the pistol is dropped, inertia cannot cause the pin to strike the primer on a chambered round. Third, Glocks have a trigger safety; a small bar that extends out of the trigger itself. This prevents the trigger from being depressed by inertial forces. Simply put, if the trigger isn't fully pressed, a Glock won't fire.

The firing pin is also referred to as a striker; thus the term "striker- fired", which is how the Glock operates without benefit of any exposed (or concealed) hammer. There is no need for a decocker, either, as the pistol is essentially cocked (or relaxed) by trigger pressure; should the shooter relax the firing finger prior to firing, the firing pin will move to a forward position again without touching the primer. When a design is this simple and works, it's almost human-proof!

Ironically, what were originally attributed as weaknesses in Glock pistols are now known to be strengths. The simple, rugged design of the Glock, including the plastic frame, enabled Glock pistols to survive the most brutal tests against both the elements and normal wear.

Several noted gun writers have put over 125,000 rounds through their personal Glocks (c.f. Chuck Taylor), with one Glock over 1,100,000 rounds, and another over 300,000 +P rounds with no structural failures to date. Glocks have successfully fired when full of water, mud, and sand. Glocks have been frozen in ice, chipped out, and fired. Glocks have been run over (with a primed case chambered) by large tractors, etc. with nothing other than scratched to the surface finish.

Glocks have been dropped from 50 feet with a chambered round and not fired. And, Glocks have proven to be among the most accurate handguns available anywhere right out of the box. Pretty good for an upstart little firm, which has grown considerably as a direct result of their inspired design.

Needless to say, the 9mm Glock Model 17 pistol was selected as the official handgun of the Austrian army. Soon after, the armies of India, Jordan, Thailand, Norway and the Philippines purchased the Glock Model 17. The Glock Model 17 was selected as the official handgun for NATO forces in Europe. The Glock 17 and 19 both have been approved for NATO service, and both have NATO stock numbers.

The Glock Model 17 was the 17th patent that Herr Gaston Glock received. It is a myth that it was so named because 1) It was the 17th version of the Glock pistol that won acceptance by the Austrian army, or 2) because the magazine holds 17 rounds of ammunition.

What some have referred to as "Glockomania" struck law enforcement and the rest of the country followed almost immediately. Armed with a tremendous amount of publicity and controversy surrounding the Glock pistol, Glock, Inc.'s law enforcement sales team, at that time led by Robert Gates, were very successful at selling their Glocks to the Law Enforcement market. Ray Reynolds was also instrumental in Glock's success story.

With all of their success, Glock has continued to evolve a better product and has also diversified their product line. Glock has to date created a total of fourteen models of Glock handguns, to include the full size 17 and 22, the competition 17L and 24/24C, the awesome 18, the compact 19, 23, and 25, the full sized big bore 20 & 21, the subcompacts 26, 27, & 28, and the compact big bore 29 & 30. The 29 should be out sometime in May of 1997.

Another thread that often seems to crop up on the Glock-L mailing list, the Usenet news group rec.guns, and even the many local ranges is the often exaggerated subject of "them Glocks a blowin' up!" Net parlance, I believe may have been coined by the gun writer Dean Speir, refers to this as a "kB!" (shorthand for kaBOOM!), a destructive explosion inside a firearm due to metal fatigue and excessive barrel pressure, usually caused by high or over pressure loads. This is the written representation of what happens when one has a catastrophic explosive event in one's firearm. A full explanation of some of these beliefs is in the Glock kB! FAQ (Frequently Asked Questions).

Occasionally I'm asked what else Glock makes besides their pistols. They also make the following items: Knives (both saw-back and plain), Austrian Army web belts, an entrenching tool, the Armorer's tool, a Flashlight Mount, the Glock sight adjustment tool, the magazine loader (that comes with each new Glock pistol

sold), special orange training magazines (the magazines used to have an orange body, but now have only an orange baseplate), and the 17-T blowback training pistol for Simunition loads (it's considered a firearm like a normal 17). The 17-T frame is blue polymer.

The latter two are only available from Glock for Law Enforcement agencies. The magazines are designed for ready indication of whether or not a magazine is loaded in the Glock, and also to segregate these often harshly treated magazines (and to relegate them strictly to range duty). The 17-T can fire either special rubber training rounds or the popular Simunition 8mm loads (a bottle necked cartridge with a 9mm case necking down to an 8mm projectile, similar to a paint ball round, that's guaranteed to leave a welt on skin). Simunition loads are also normally only sold to Law Enforcement, and are somewhat expensive anyway.

Another oft asked question is "what kind of ammo do you carry in your Glock?" or "What's the best ammo for Glocks?" The first possibly has no relevance to your particular situation, and the second is like "What's the best kind of automobile?" Well, what do you want to do with it, and under what circumstances?

I consider the best type of ammunition for your Glock to be a personal matter. Glock's sole advice is to use only "high quality commercially manufactured ammunition, in excellent condition and in the original caliber of your Glock pistol" and that usually means ammunition manufactured to SAAMI or NATO specs. Note there are currently only NATO specs for 9mm ammunition, at least as far as the Glock pistol calibers are concerned.

To attempt to answer the question in all cases, find one that feeds with reliability. I consider this the most important aspect of any semi-automatic firearm ammunition. For defense, whatever modern hollow point is legal (and feeds 100%; see #1!) will probably work, as I believe the three most important aspects of the mythical "stopping power" are shot placement, shot placement, and (you guessed it) shot placement.

That doesn't mean that I don't test my ammunition for flash, consistency, accuracy, reliability, etc. It does mean I personally discount all of the "exotics" (Glaser, Magsafe, etc.) How can I cycle my off duty / carry ammo every few months if it costs me maybe 100 rounds of ammo to do it? With a low price for the exotics being maybe \$2 per round, this simply isn't feasible for most of us. Nor will (or can) the average person try enough of the ammo in their pistol to assure proper feeding, sight in, etc.

Another oft asked question is whether or not it's safe to dry fire a Glock? When fully assembled, the Glock is one of the few pistols available specifically designed to be dry-fired. How else would you be able to field-strip your Glock? :) Remember, Glocks must be completely unloaded first, then pointed in a safe direction and the trigger must be pressed completely to the rear in order to disassemble.

Also, by dry firing, I have found that all of my Glock triggers got smoother over the years as well; an additional side benefit!

For information pertaining to GSSF (the Glock Sports Shooting Foundation) I will refer you to two very detailed sources:

Glock's official GSSF page is here, but Mike Sumner's Unofficial GSSF page is currently even more informative than the official page! You can join the GSSF at Glocks official page. Luckily, GSSF is geared towards safe use of Glocks and "non-racegun" type friendly competition with them.

83 percent of the Glock 17's mass is metal; the remaining 17 percent is polymer. The Glock pistol slide rides on four super hardened metal rails.

The slide on Glock pistols can physically only come off of the pistol towards the muzzle.

The original Glock magazines were purposely designed to -not- drop free during reloading so that they would be

removed by hand and not lost on the battlefield during combat (remember, this pistol was designed for military duty). The American market wanted drop free magazines, so they were created for us. Now, there are no more of the older design for sale in the USA.

The polymer frame is completely solid and functional from negative 65 degrees to 400 degrees Fahrenheit. (Note: If the pistol isn't operable, you won't be either! Ed.)

The lines on the breech face are created when the breach face is broach cut and formed. Glock found it did not affect function in any way, so the breech face was never polished out by hand (which would add to the cost of the pistol).

The Glock 9mm models 17 and 19 have only 33 parts, the other pistols have 34 (they add a reinforcing pin through the locking block). This is less than half the number of components versus most comparable duty pistols. Fewer parts means fewer things to go wrong, everything else being equal. This follows my premise of "Keep It Simple, Stupid!"

It takes approximately 80 seconds to injection mold the lower receiver of a Glock pistol. It takes approximately 8 hours for a single billet of carbon steel to be made into a Glock slide by a CNC machine.

All Glocks come into the US and are distributed there via Glock, Inc. in Smyrna, GA. (Nice folks, BTW -Ed.) They are all shipped with different triggers (all are grooved "target" triggers) and a different "flimsier than even the factory adjustable sight" (the so called "weekend" sight) that was designed by Herr Glock over a weekend for import purposes to get around ATF's point system, enacted in the USA in 1968.

*22. Conclusions / How to contact the Author

I've found the Glock to be an excellent pistol. I've carried one every day for many years now and trust it with my life. I've found it to be a worthy companion. If you have any questions or comments, I'd be glad to try to answer any questions and reply to any comments. If I can't answer your question, you can contact Glock or your nearest Glock field representative.

The quickest, easiest, and best way to contact me is by Internet Email at one of the following (listed in order of preference):

```
<john@soon.com>
<jmleveron@hotmail.com> (this one will take weeks for me to read)
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Snail Mail (a distant second choice) is available via:

```
John Leveron
P.O. Box 105323
Jefferson City, MO
65110-5323 U.S.A.

Please include a self addressed stamped envelope if you want a
return reply due to the mailing costs for replies.

The KATN BBS (now shut down, please discontinue calling)

[573] 896-9309 (area code changed from 314 to 573 in July of 1996)
we were up 24 hours a day, 365 days a year :) for many years
```

I used to run The KATN BBS, which was located in Holts Summit, MO. It was a free access electronic Bulletin Board System dedicated to the right (of the average citizen) to keep and bear arms. Access and file privileges were granted on the first call, with anonymous login available.

John Leveron was (until late 1996) a full time Police Officer. He is a Factory Certified Glock and Beretta Armorer. He served as the primary firearms instructor for his Police Department. He is currently a reserve Deputy Sheriff. His hobbies include camping, shooting, online computing, programming, and reloading. Many files related to his interests were on his BBS. Many were transferred over to Frugal Squirrels homepage (it's listed in my links section).

*23. Addresses / Phone Numbers; How to contact Glock, Inc.

Again, please bear in mind that Glock is not responsible for this document. Glock may, however, be contacted for questions or comments about their pistols. Glock may be reached as follows:

```
(In the U.S.A., Canada)
Glock, Inc.
6000 Highlands Parkway S.E.
Smyrna, Georgia 30082-7204 USA
(or P.O. Box 369, Smyrna, GA 30081-0369 USA)
Telephone (770) 432-1202
Fax
         (770) 433-8719
Telex
          543353 glock atl ud
(In Europe, Africa, Middle East)
Glock Ges.m.b.H.
P.O. Box 50
A-2232 Deutsch-Wagram, Austria
Telephone (43) 2247-2460
         (43) 2247-2460/12
Fax
        133 307 glock a
Telex
(In Asia, Australia)
Glock (H.K.) Ltd.
No. 1, Ma Wor Road, Tai Po
New Territories, Hong Kong
Telephone (852) 657-2868
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(In Latin America, Central America, Caribbean)

Glock America N.V.

International Trade Center

P.O. Box 62.28

Curacao, Netherlands Antilles

Telephone (599-9) 636201,636202

Fax (599-9) 636526

(In France)

Glock France S.A.

50, Avenue Victor Hugo

F-92500 Rueil Malmaison

France

Telephone (33) 1 47 .49.86.03

Fax (33) 1 47 .49.74.17
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*24. Special Thanks

I would like to thank Glock for their generous assistance with this project and for providing certain technical information. I would also like to thank them for creating such a fine pistol.

Thanks also goes to Jack D'Orazi, who originally converted the UGUM into .html format and put it on the web. He also originally hosted my web page (the UGUM was once located on his server!).

I'm sure I've missed some people. Email me and let me know! Such things are important, too.

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John Leveron,
(former Sysop, The KATN BBS)

Last updated: Sunday, April 13, 1997
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.html version originally coded by Jack D'Orazi

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